IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF TEXAS WACO DIVISION

WSOU INVESTMENTS, LLC d/b/a	§	CIVIL ACTION NO. 6:20-cv-487-ADA
BRAZOS LICENSING AND	§	CIVIL ACTION NO. 6:20-cv-488-ADA
DEVELOPMENT,	§	CIVIL ACTION NO. 6:20-cv-489-ADA
	§	CIVIL ACTION NO. 6:20-cv-490-ADA
Plaintiff,	§	CIVIL ACTION NO. 6:20-cv-491-ADA
1 minutes,	§	CIVIL ACTION NO. 6:20-cv-492-ADA
V.	§	CIVIL ACTION NO. 6:20-cv-493-ADA
•	§	CIVIL ACTION NO. 6:20-cv-494-ADA
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ZTE CORPORATION,	§	CIVIL ACTION NO. 6:20-cv-496-ADA
ZIZ coru orumon,	§	CIVIL ACTION NO. 6:20-cv-497-ADA
Defendant.	§	
2 oronaum.	§	JURY TRIAL DEMANDED

CLAIM CONSTRUCTION ORDER

The Court held a *Markman* hearing on March 3, 2022. During that hearing, the Court provided its final constructions. The Court now enters those claim constructions.

SIGNED this 3rd day of March, 2022.

ALAN D ALBRIGHT

UNITED STATES DISTRICT JUDGE

A. Group 1 Patents (Nos. 6:20-cv-00487, -00488, -00494, -00496)

	U.S. Patent No. 7,489,929 (Case No. 6:20-cv-00488-ADA)					
Claim(s)	Claim Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction	Court's Final Construction		
11	"buffering bearer traffic" (claim 11) (Proposed by Defendant)	Plain and ordinary meaning	"During a handoff process, all data from the mobile station is buffered at the mobile station or all data at the network side is buffered at the network side until the handoff process is complete."	Plain-and-ordinary meaning		
14	"characteristic" (claims 14) (Proposed by Defendant)	Plain and ordinary meaning; not indefinite	Indefinite under 35 U.S.C. § 112(b)	Not indefinite. Plain-and-ordinary meaning.		
14	"replacement hysteresis" (claims 14) (Proposed by Defendant)	Plain and ordinary meaning; not indefinite	Indefinite under 35 U.S.C. § 112(b)	Not indefinite. Plain-and-ordinary meaning.		
		U.S. Patent No. 7,742,534 (Case)	No. 6:20-cv-00496-ADA)			
Claim(s)	Claim Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction	Court's Final Construction		
4, 7	"maximal number of sub- carriers" (claim 4) / "maximum number of sub-carriers" (claim 7) (Proposed by Defendant)	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Not indefinite. Plain-and-ordinary meaning.		

6	"means for selecting a set of sub-carriers from the plurality of sub-carriers on which user data is to be communicated from a transmitter to a receiver" (claim 6) (Proposed by Defendant)	Governed by pre-AIA 35 U.S.C. § 112, ¶6; not indefinite. Function: selecting a set of subcarriers from the plurality of subcarriers on which user data is to be communicated from a transmitter to a receiver. Structure: transmitter configured to perform corresponding operation(s), such as, (i) receive quality levels from receiver, (ii) transmit threshold indication to receiver, (iii) select the set of sub-carriers based at least in part on either the received quality level or the transmitted threshold indication (or both).	Function: selecting a set of subcarriers from the plurality of subcarriers on which user data is to be communicated from a transmitter to a receiver. Structure: none disclosed. Indefinite under 35 U.S.C § 112(b).	Subject to § 112, ¶ 6. Function: selecting a set of sub-carriers from the plurality of sub-carriers on which user data is to be communicated from a transmitter to a receiver. Structure: transmitter as described in Fig. 3 and corresponding text, and equivalents.
6	"means for determining quality levels for sub-carriers" (claim 6) (Proposed by Defendant)	Not governed by pre-AIA 35 U.S.C. § 112, ¶6; not indefinite. But if deemed governed by pre-AIA 35 U.S.C. § 112, ¶6, then: Function: determining quality levels for sub-carriers Structure: receiver configured to perform corresponding operation(s), such as measure the SIR for sub carriers (see, e.g., 5:19-24).	Governed by 35 U.S.C. § 112(f) Function: determining quality levels for sub-carriers Structure: none disclosed. Indefinite under 35 U.S.C. § 112(b).	Subject to § 112, ¶ 6 Function: determining quality levels for sub-carriers Structure: receiver as described in Fig. 4 and corresponding text, and equivalents.

1, 2, 3, 5-9, 13, 16-18	"quality levels" (claims 1, 2, 3, 5-9, 13, 16-18)	Plain and ordinary meaning	"One of a signal-to-interference ratio, a bit error rate, or a modulation scheme."	Plain-and-ordinary meaning
	(Proposed by Defendant)			
1, 6, 16	"as a function of" (claims 1, 6, 16)	Plain and ordinary meaning	"One of a signal-to-interference ratio, a bit error rate, or a modulation scheme."	Plain-and-ordinary meaning
	(Proposed by Defendant)			
		U.S. Patent No. 8,451,839 (Case	No. 6:20-cv-00487-ADA)	
Claim(s)	Claim Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction	Court's Final Construction
1, 3, 6, 8, 11	"route" (claims 1, 6, 11) / "route-related information" (claims 1, 3, 6, 8)	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Not indefinite. Plain-and-ordinary meaning.
	(Proposed by Defendant)			
1, 6	"said predefined using time indicates[ing] a [the] using time of said route" (claims 1, 6)	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Not indefinite. Plain-and-ordinary meaning.
	(Proposed by Defendant)			
6	"the using time" (claim 6)	Plain and ordinary meaning; not indefinite.	Indefinite for lack of antecedent basis under 35 U.S.C. § 112(b).	Not indefinite. Plain-and-ordinary meaning.
	(Proposed by Defendant)		3112(0).	
	,	U.S. Patent No. 9,185,036 (Case	No. 6:20-cv-00494-ADA)	
Claim(s)	Claim Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction	Court's Final Construction

1, 6-10, 12, 17- 21, 23-24	"data flow" (claims 1, 6-10, 12, 17–21, 23–24) / "to enable thereby the control of at least one data flow" (claims 1, 12, 23–24) / "data flow is controlled" (claim 7–9, 18–20) / "a data flow" (claims 1, 6, 17, 23) / "the data flow" (claim 7–9, 18–20) (Proposed by Defendant)	Plain and ordinary meaning (for each one of the <u>five</u> disputed phrases); none of the <u>five</u> disputed phrases is indefinite.	Indefinite under 35 U.S.C. § 112(b).	Not indefinite. Plain-and-ordinary meaning.
1-4, 6, 12-15, 17, 23-24	"congestion condition to enable thereby the control of at least one data flow in a manner tending to reduce the congestion condition" (claims 1, 12, 23, 24) / "congestion condition" (claims 1–4, 6, 12–15, 17, 23–24) / "indication that a congestion condition exists" (claims 1, 23) (Proposed by Defendant)	Plain and ordinary meaning (for each one of the three disputed phrases); none of the three disputed phrases is indefinite.	Indefinite under 35 U.S.C. § 112(b).	The Court previously increased the limit on the number of claim terms from 10 to 12. Because Defendant exceeded even that increased limit, the Court will not construe these terms.

B. Group 2 Patents (Nos. 6:20-cv-00489, -00492, -00495)

	U.S. Patent No. 7,487,240 (Case No. 6:20-cv-00489-ADA))					
Claim(s)	Claim Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction	Court's Final Construction		
1, 6, 13	"verifying connectivity in the network relating to at least Layer-2 and Layer-3 objects" (claims 1, 6, and 13) (Proposed by Defendant)	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Not indefinite. Plain-and-ordinary meaning.		
1, 6, 13	"a given containment hierarchy" (claims 1, 6, and 13) (Proposed by Defendant)	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Not indefinite. Plain-and-ordinary meaning.		
1, 6, 13	"the connectivity verification result(s) associated with the alarm" (claims 1, 6, and 13) (Proposed by Defendant)	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Not indefinite. Plain-and-ordinary meaning.		
		U.S. Patent No. 8,147,071 (Case	No. 6:20-cv-00492-ADA)			
Claim(s)	Claim Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction	Court's Final Construction		
1, 9, 13, 14	"the processor" / "wherein the processor is configured to" (claims 1, 9, 13, and 14)	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Preambles are not limiting except for "processor" in Claim 1 "processor(s)" in Claim 14		
	(Proposed by Defendant)					

			Not indefinite. Plain-and-ordinary meaning.
"movement signalling" / "receiv[ing] movement signalling associated with the movement of the projector" / "corresponding movement signalling" (claims 1, 9, 13, and 14) (Proposed by Defendant)	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Not indefinite. Plain-and-ordinary meaning.
"discriminate" / "discriminate a movement criterion" / "the processor is configured to discriminate a movement criterion" (claims 1, 13, 14) (Proposed by Defendant)	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Not indefinite. Plain-and-ordinary meaning.
"provide associated image data signalling to project associated image data" (claims 1, 13, 14) (Proposed by Defendant)	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Not indefinite. Plain-and-ordinary meaning.
"a movement sensor configured to detect movement of the apparatus and/or a projector" (claim 9)	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Not indefinite. Plain-and-ordinary meaning.
	"receiv[ing] movement signalling associated with the movement of the projector" / "corresponding movement signalling" (claims 1, 9, 13, and 14) (Proposed by Defendant) "discriminate" / "discriminate a movement criterion" / "the processor is configured to discriminate a movement criterion" (claims 1, 13, 14) (Proposed by Defendant) "provide associated image data signalling to project associated image data" (claims 1, 13, 14) (Proposed by Defendant) "a movement sensor configured to detect movement of the apparatus and/or a projector"	"receiv[ing] movement signalling associated with the movement of the projector" / "corresponding movement signalling" (claims 1, 9, 13, and 14) (Proposed by Defendant) "discriminate" / "discriminate a movement criterion" / "the processor is configured to discriminate a movement criterion" (claims 1, 13, 14) (Proposed by Defendant) "provide associated image data signalling to project associated image data" (claims 1, 13, 14) (Proposed by Defendant) "provide associated image data signalling to project associated image data" (claims 1, 13, 14) (Proposed by Defendant) "a movement sensor configured to detect movement of the apparatus and/or a projector" (claim 9)	"receiv[ing] movement signalling associated with the movement of the projector" / "corresponding movement signalling" (claims 1, 9, 13, and 14) (Proposed by Defendant) "discriminate" / "discriminate a movement criterion" / "the processor is configured to discriminate a movement criterion" (claims 1, 13, 14) (Proposed by Defendant) "provide associated image data signalling to project associated image data" (claims 1, 13, 14) (Proposed by Defendant) "provide associated image data signalling to project associated image data" (claims 1, 13, 14) (Proposed by Defendant) "a movement sensor configured to detect movement of the apparatus and/or a projector" (claim 9) Indefinite under 35 U.S.C. § 112(b) Indefinite under 35 U.S.C. § 112(b) Indefinite under 35 U.S.C. § 112(b)

		U.S. Patent No. 9,258,232 (Case	No. 6:20-cv-00495-ADA)	
Claim(s)	Claim Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction	Court's Final Construction
1, 14	"instructions for execution by a traffic flow control system for performing flow control on a flow of data packets for transmission over a link" (claim 14)	Not indefinite and not subject to 35 U.S.C. § 112, ¶6; Plain and ordinary meaning.	Governed by 35 U.S.C. § 112(f) Function: execution by a traffic flow control system for performing flow control on a flow of data packets for transmission over a link Indefinite under 35 U.S.C. § 112(b); Structure: none disclosed	Preamble is not limiting. No construction is necessary.
	"flow control" (claim 1) (Proposed by Defendant)	Plain and ordinary meaning	"regulate movement of a series of data packets"	Plain-and-ordinary meaning
1, 14	"transmission over a link" (claims 1 & 14) (Proposed by Defendant)	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Not indefinite. Plain-and-ordinary meaning.
14	"instructions for receiving, by a controller of the traffic flow control system, a backpressure signal, wherein the back pressure signal indicates a	Not indefinite and not subject to 35 U.S.C. § 112, ¶6; Plain and ordinary meaning.	Governed by 35 U.S.C. § 112(f) Function: receiving, by a controller of the traffic flow control system, a backpressure signal, wherein the back	Not subject to 35 U.S.C. § 112, ¶6. Plain and ordinary meaning.

Ī	period of congestion" (claim 14)	pressure signal indicates a period of congestion	
	(Proposed by Defendant)	Indefinite under 35 U.S.C. § 112(b);	
		Structure: none disclosed	

C. Group 3 Patents (Nos. 6:20-cv-00490, -00491, -00493, -00497)

	U.S. Patent No. 7,203,505 (Case No. 6:20-cv-00497)					
Claim(s)	Claim Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction	Court's Final Construction		
1, 14, 23	"a formatter to format the received data into at least one SMS (Short Message Service) message" / "formatting" / "formatter to format" (Claims 1, 14, 23) (Proposed by Defendant)	Not indefinite and not subject to 35 U.S.C. § 112, ¶6; Plain and ordinary meaning.	Governed by 35 U.S.C. § 112(f) Function: formatting the received data into at least one SMS (Short Message Service) message Indefinite under 35 U.S.C. § 112(b); specification fails to describe it Structure: none disclosed	Claims 1 and 23: Plain and ordinary meaning. Not indefinite and not a means-plus-function term. "formatter to format" in claim 14 is subject to § 112 ¶ 6. Function (claim 14): formatting the received data into at least one SMS message. Structure (claims 14): code stored in the mobile terminal programmed with an algorithm to insert the received data into one SMS message if it fits, as shown in Fig. 2, and otherwise to other insert the received data into more than one SMS message as shown in Fig. 3.		

1, 14, 23	"SMS (Short Message Service)" (Claims 1, 14, 23	Plain and ordinary meaning	"Cellular based messages of limited size consisting of text and numbers."	Plain and ordinary meaning.			
	(Proposed by Defendant)						
	U.S. Patent No. 8,179,960 (Case No. 6:20-cv-00490)						
Claim(s)	Claim Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction	Court's Final Construction			
1-3, 9-10, 15- 17, 23-24	"virtual reference" (Claims 1, 2, 3, 9, 10, 15, 16, 17, 23, and 24) (Proposed by Defendant)	"A group of pixels (e.g., a block) that is used as reference material for encoding portions of the video signal (e.g., a motion-compensated interpredicted block), but that does not comprise or represent any portion of the actual video sequence to be displayed."	"A group of pixels used as reference material for encoding portions of the video signal, but that does not comprise or represent any portion of the actual video sequence to be displayed."	"A group of pixels that is used as reference material for encoding portions of the video signal, but that does not comprise or represent any portion of the actual video sequence to be displayed."			
1, 9, 15, 23	"does not represent any portion of any individual frame of the original video signal" (Claims 1, 9, 15, 23) (Proposed by Defendant)	Plain and ordinary meaning	"Data generated based on a portion of a video signal but not to be displayed with the video signal."	Plain and ordinary meaning.			
3, 17	"minimize differences" (Claims 3 and 17) (Proposed by Defendant)	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Plain and ordinary meaning; not indefinite.			
		U.S. Patent No. 8,730,905 (Ca	se No. 6:20-cv-00491)				
Claim(s)	Claim Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction	Court's Final Construction			

4, 15	"during a time interval between data transmission intervals during the transmission period" (Claims 4, 15)	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Plain and ordinary meaning; not indefinite.
	(Proposed by Defendant)			
5, 16	"at least one frequency channel indicator" (Claims 5, 16)	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Plain and ordinary meaning, which is at least one "frequency channel indicator." Not indefinite.
	(Proposed by Defendant			
9, 21	"causing the transmission of the reservation message on each frequency band separately" (Claims 9, 21)	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Plain and ordinary meaning, where "separately" refers to separate frequency bands.
	(Proposed by Defendant)			
		U.S. Patent No. 9,294,060 (Ca	ase No. 6:20-cv-00493)	
Claim(s)	Claim Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction	Court's Final Construction
1, 10	"extracting a feature vector" (Claims 1, 10) (Proposed by Defendant)	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Plain and ordinary meaning; not indefinite.
	, <u>, , , , , , , , , , , , , , , , , , </u>			
1, 10	"level value is attenuated" (Claims 1, 10)	Plain and ordinary meaning; not indefinite.	Indefinite under 35 U.S.C. § 112(b)	Plain and ordinary meaning; not indefinite.
	(Proposed by Defendant)			

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1, 10	"spectral shape parameter"	Plain and ordinary meaning	"A sub band energy level value or a sub	Plain and ordinary meaning.
	(Claims 1, 10)		band gain factor based on the sub band	
			energy level value"	
	(Proposed by Defendant)			